1.   A method of encrypting a digital television signal, comprising:

        examining unencrypted packets of data in the digital television signal to identify a predetermined packet type;

        encrypting packets identified as being of the predetermined packet type; and

        replacing the unencrypted packets of the predetermined packet type with the encrypted packets in the digital television signal to produce a partially encrypted digital television signal.

2.   The method according to claim 1, further comprising distributing the partially encrypted digital television signal.

3.   The method according to claim 1, wherein the predetermined packet type comprises a packet carrying information that is needed to decode the digital television signal.

4.   The method according to claim 1, wherein the digital television signal complies with an MPEG standard, and wherein the predetermined packet type comprises packets carrying a payload that comprises a packetized elementary stream (PES) header.

5.   The method according to claim 1, wherein the digital television signal complies with the digital satellite service transport standard, and wherein the predetermined packet type comprises packets carrying a payload of a packetized elementary stream header.

6.   The method according to claim 1, wherein the predetermined packet type comprises video packets carrying a payload of a video sequence header.

7.   The method according to claim 1, wherein the predetermined packet type comprises video packets carrying a payload of a group of pictures header.

8.   The method according to claim 1, wherein the predetermined packet type comprises video packets carrying a payload of closed captioning information.

9.   The method according to claim 1, further comprising assigning a packet identifier to the unencrypted packets.

10.   The method according to claim 9, further comprising assigning the packet identifier to the encrypted packets.

11.   The method according to claim 9, wherein the packet identifier comprises a primary packet identifier; and further comprising assigning a secondary packet identifier to the encrypted packets.

12.   An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a television signal according to claim 1.

13.   An electronic transmission medium carrying an encrypted television signal encrypted by the method according to claim 1.

14.   The method according to claim 1, wherein the television signal is compressed, and wherein the predetermined packet type comprises a packet carrying information that is needed to decompress the television signal.

15.   The method according to claim 3, further comprising selecting packets according to a second selection criteria and encrypting the selected packets.

1   16.   A method of encrypting a digital television signal, comprising:

2   examining unencrypted packets of data in the digital television signal to

3   identify a predetermined packet type;

4   encrypting packets identified as being of the predetermined packet type

5   using a first encryption method to produce first encrypted packets;

6   encrypting the packets identified as being of the predetermined packet type

7   using a second encryption method to produce second encrypted packets; and

8   replacing the unencrypted packets of the predetermined packet type with the

9   first encrypted packets and the second encrypted packets in the digital television

10   signal to produce a partially dual encrypted television signal.

11

12   17.   The method according to claim 16, further comprising distributing the

13   partially dual encrypted digital television signal.

14

15   18.   The method according to claim 16, wherein the predetermined packet type

16   comprises a packet carrying information that is needed to decode the digital

17   television signal.

18

19   19.   The method according to claim 17, wherein the television signal is

20   compressed, and wherein the predetermined packet type comprises a packet

21   carrying information that is needed to decompress the digital television signal.

22

23   20.   The method according to claim 17, wherein the predetermined packet type

24   comprises packets carrying information needed to access the digital television

25   signal.

26

27   21.   The method according to claim 17, wherein the digital television signal

28   complies with an MPEG standard, and wherein the predetermined packet type

29   comprises transport stream packets carrying a payload that comprises a

30   packetized elementary stream (PES) header.

22. The method according to claim 17, wherein the digital television signal complies with the digital satellite service transport standard, and wherein the predetermined packet type comprises packets carrying a payload of a packetized elementary stream header.

23. The method according to claim 17, wherein the predetermined packet type comprises video packets carrying a payload of a video sequence header.

24. The method according to claim 17, wherein the predetermined packet type comprises video packets carrying a payload of a group of pictures header.

25. The method according to claim 17, wherein the predetermined packet type comprises video packets carrying a payload of closed captioning information.

26. The method according to claim 17, further comprising assigning a packet identifier to the unencrypted packets.

27. The method according to claim 26, further comprising assigning the packet identifier to the first encrypted packets.

28. The method according to claim 17, further comprising assigning a secondary packet identifier to the second encrypted packets.

29. An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of encrypting a digital television signal according to claim 17.

30. An electronic transmission medium carrying an encrypted digital television signal encrypted by the method according to claim 11.

31.   A method of encrypting a digital television signal, comprising:

examining packets of data in the digital television signal to identify a predetermined packet type;

encrypting packets identified as being of a predetermined packet type; and

distributing the digital television signal with encrypted packets of the predetermined packet type along other packets that are unencrypted.

32.   The method according to claim 31, wherein the encrypting comprises encrypting packets identified as a packets that are needed to decode the digital television signal.

33.   The method according to claim 31, wherein the digital television signal is compressed, and wherein the predetermined packet type comprises a packet type that is needed to decompress the digital television signal.

34.   The method according to claim 33, wherein the digital television signal complies with an MPEG standard, and wherein the predetermined packet type is identified as transport stream packet carrying a payload that comprises a packetized elementary stream (PES) header.

35.   The method according to claim 31, wherein the digital television signal complies with the digital satellite service transport standard, and wherein the predetermined packet type comprises packets carrying a payload of a packetized elementary stream header.

36.   The method according to claim 31, wherein the predetermined packet type comprises video packets carrying a payload of a video sequence header.

37.   The method according to claim 31, wherein the predetermined packet type comprises video packets carrying a payload of a group of pictures header.

1   38.   The method according to claim 31, wherein the predetermined packet type

2   comprises video packets carrying a payload of closed captioning information.

3

4   39.   The method according to claim 31, wherein the digital television signal

5   complies with an MPEG standard, and wherein the predetermined packet type is

6   identified as a packet containing MPEG I-picture packets.

7

8   40.   An electronic storage medium storing instructions which, when executed on

9   a programmed processor, carry out the method of encrypting a digital television

10   signal according to claim 31.

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1   41.   An encrypted television program, comprising:

2   a plurality of unencrypted packets; and

3   a plurality of encrypted packets, wherein the encrypted packets contain

4   information required to decode the television program.

5

6   42.   The encrypted television program according to claim 41, wherein the

7   unencrypted packets and encrypted packets comprise transport stream packets.

8

9   43.   The encrypted television program according to claim 41, wherein the

10   encrypted transport stream packets comprise packets containing MPEG packetized

11   elementary stream (PES) headers.

12

13   44.   The encrypted television program according to claim 41, wherein the digital

14   television program complies with the digital satellite service transport standard, and

15   wherein the encrypted packets comprise packets carrying a payload of a

16   packetized elementary stream header.

17

18   45.   The encrypted television program according to claim 41, wherein the

19   encrypted packets comprise video packets carrying a payload of a video sequence

20   header.

21

22   46.   The encrypted television program according to claim 41, wherein the

23   encrypted packets comprise video packets carrying a payload of a group of pictures

24   header.

25

26   47.   The encrypted television program according to claim 41, wherein the

27   encrypted packets comprise video packets carrying a payload of closed captioning

28   information.

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48. The encrypted television program according to claim 41, wherein the digital television program is encoded according to an MPEG standard, and wherein the encrypted and unencrypted packets are identified by a packet identifier.

49. The encrypted television program according to claim 41, wherein the digital television program is encoded according to an MPEG standard, and wherein the unencrypted packets are identified by a primary packet identifier, and wherein the encrypted packets are identified by a secondary packet identifier.

50. The method according to claim 41, wherein the television program is compressed, and wherein the predetermined packet type comprises a packet type that is required to decompressing the television program.

51.   A television set-top box, comprising:

a receiver receiving a digital television signal comprising:

a plurality of unencrypted packets; and

a plurality of encrypted packets, wherein the encrypted packets contain information required to decode the digital television signal;

a decrypter that decrypts the encrypted packets; and

a decoder that decodes the unencrypted packets and the decrypted packets to produce a signal suitable for play on a television set.

52.   The apparatus according to claim 51, wherein the unencrypted packets and encrypted packets comprise transport stream packets.

53.   The apparatus according to claim 51, wherein the encrypted transport stream packets comprise packets containing MPEG packetized elementary stream (PES) headers.

54.   The apparatus according to claim 51, wherein the digital television signal complies with an MPEG standard, and wherein the encrypted and unencrypted packets are identified by a packet identifier.

55.   The apparatus according to claim 51, wherein the digital television signal complies with an MPEG standard, and wherein the unencrypted packets are identified by a primary packet identifier, and wherein the encrypted packets are identified by a secondary packet identifier.

56.   The apparatus according to claim 51, wherein the digital television signal is compressed, and wherein the encrypted packets comprises a packet type that is needed to decompress the digital television signal.

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57.   The apparatus according to claim 56, further comprising decompressing means for decompressing the compressed digital television signal.

58.   The apparatus according to claim 51, wherein the digital television signal complies with the digital satellite service transport standard, and wherein the encrypted packets comprise packets carrying a payload of a packetized elementary stream header.

59.   The apparatus according to claim 51, wherein the encrypted packets comprise video packets carrying a payload of a video sequence header.

60.   The apparatus according to claim 51, wherein the encrypted packets comprise video packets carrying a payload of a group of pictures header.

61.   The apparatus according to claim 51, wherein the encrypted packets comprise video packets carrying a payload of closed captioning information.

1   62.   A method of decoding a partially encrypted television program, comprising:

2   receiving a digital television program comprising a plurality of packets,

3   wherein certain packets of the plurality of packets are encrypted and a remainder

4   of the packets are unencrypted, wherein the encrypted packets contain information

5   that is required for correct decoding of the television program;

6   decrypting the encrypted packets to produce decrypted packets; and

7   decoding the decrypted packets and the unencrypted packets to produce a

8   decoded television signal.

9

10   63.   The method according to claim 62, wherein the partially encrypted television

11   program is a digital television program, and wherein the certain encrypted packets

12   comprise packets that are needed to decode the television program.

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14   64.   The method according to claim 62, wherein the partially encrypted television

15   program is compressed, and wherein the certain packets comprises packets

16   carrying information that is needed to decompress the television program.

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18   65.   The method according to claim 64, wherein the partially encrypted television

19   program complies with an MPEG standard, and wherein the certain packets

20   comprise transport stream packets carrying a payload that comprises a packetized

21   elementary stream (PES) header.

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23   66.   An electronic storage medium storing instructions which, when executed on

24   a programmed processor, carry out the method of decrypting a television program

25   according to claim 64.

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27   67.   The method according to claim 64, wherein the receiving, decrypting and

28   decoding are carried out in a television device.

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68.   The method according to claim 67, wherein the television device comprises a television set-top box.

69.   The method according to claim 64, wherein the partially encrypted television program complies with the digital satellite service transport standard, and wherein the encrypted packets carry a payload of a packetized elementary stream header.

70.   The method according to claim 64, wherein the encrypted packets comprise video packets carrying a payload of a video sequence header.

71.   The method according to claim 64, wherein the encrypted packets comprise video packets carrying a payload of a group of pictures header.

72.   The method according to claim 64, wherein the encrypted packets comprise video packets carrying a payload of closed captioning information.

73.   A method of decoding partially encrypted content, comprising:

receiving partially encrypted content comprising unencrypted content, content encrypted under both a first encryption system and a second encryption system, the encrypted content comprising information needed for correct decoding of the partially encrypted content; and

decrypting the encrypted content under the first encryption system to produce decrypted content.

74.   The method according to claim 73, further comprising decoding the unencrypted content and the decrypted content to decode the partially encrypted content.

75.   The method according to claim 73, wherein the partially encrypted content comprises a digital television program, and wherein the encrypted content comprises packets that are needed for correct decoding the television program.

76.   The method according to claim 73, wherein the partially encrypted content comprises a digital television program, and wherein the digital television program is compressed, and wherein the encrypted content comprises packets carrying information that is needed to decompress the television program.

77.   The method according to claim 77, wherein the digital television program complies with an MPEG standard, and wherein the encrypted content comprises transport stream packets carrying a payload that comprises a packetized elementary stream (PES) header.

78.   The method according to claim 76, wherein the digital television signal complies with the digital satellite service transport standard, and wherein the encrypted packets carry a payload of a packetized elementary stream header.

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79. The method according to claim 73, wherein the encrypted content comprises
video packets carrying a payload of a video sequence header.

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80. The method according to claim 73, wherein the encrypted content comprises
video packets carrying a payload of a group of pictures header.

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81. The method according to claim 73, wherein the encrypted content comprises
video packets carrying a payload of closed captioning information.

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82. An electronic storage medium storing instructions which, when executed on
a programmed processor, carry out the method of decoding according to claim 73.

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83. The method according to claim 73, wherein the receiving, decrypting and
decoding are carried out in a television device.

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84. The method according to claim 73, wherein the television device comprises
a television set-top box.

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85. The method according to claim 73, wherein the receiving, decrypting and
decoding are carried out in an integrated circuit.

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86. The method according to claim 85, wherein the integrated circuit comprises
one of an application specific integrated circuit and a field programmable gate
array.

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87. The method according to claim 73, wherein the receiving, decrypting and
decoding are carried out in a plurality of integrated circuits.

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1   88.   The method according to claim 87, wherein the plurality of integrated circuit

2   comprises at least one of an application specific integrated circuit and a field

3   programmable gate array.

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89.   A method of decoding a partially encrypted television program, comprising:

receiving the partially encrypted television program comprising a plurality of clear packets, a plurality of packets encrypted under a first encryption algorithm, and a plurality of packets encrypted under a second encryption algorithm;

wherein the packets encrypted under the first and second encryption algorithms are packets that are needed for proper decoding of the television program;

decrypting the packets encrypted under the first encryption algorithm to produce decrypted packets; and

decoding the decrypted packets and the clear packets.

90.   The method according to claim 89, wherein the television program comprises a digital television program.

91.   The method according to claim 89, wherein the partially encrypted television program is compressed, and wherein the encrypted packets comprises packets carrying information that is needed to decompress the television program.

92.   The method according to claim 91, wherein the program is encoded according to an MPEG standard, and wherein the encrypted packets comprise transport stream packets carrying a payload that comprises a packetized elementary stream (PES) header.

93.   The method according to claim 89, wherein the partially encrypted television program complies with the digital satellite service transport standard, and wherein the encrypted packets carry a payload of a packetized elementary stream header.

94.   The method according to claim 89, wherein the encrypted packets comprise video packets carrying a payload of a video sequence header.

95. The method according to claim 89, wherein the encrypted packets comprise video packets carrying a payload of a group of pictures header.

96. The method according to claim 89, wherein the encrypted packets comprise video packets carrying a payload of closed captioning information.

97. An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of decoding a television signal according to claim 89.

98. The method according to claim 89, wherein the receiving, decrypting and decoding are carried out in an integrated circuit.

99. The method according to claim 98, wherein the integrated circuit comprises an application specific integrated circuit.

100. The method according to claim 89, wherein the receiving, decrypting and decoding are carried out in a television device.

101. The method according to claim 100, wherein the television device comprises a television set-top box.

102. A method of decoding a partially encrypted television program, comprising:

receiving the partially encrypted television program comprising a plurality of clear packets, a plurality of packets encrypted under a first encryption algorithm, and a plurality of packets encrypted under a second encryption algorithm;

wherein the packets encrypted under the first and second encryption algorithms are packets that are needed to properly decode the television program;

wherein the clear packets are identified by a first packet identifier;

wherein the packets encrypted under the first encryption algorithm are identified by a second packet identifier (PID), and wherein the packets encrypted under the second encryption algorithm are identified by a third packet identifier (PID); and

decrypting the packets encrypted under the first encryption algorithm to produce decrypted packets.

103. The method according to claim 102, further comprising decoding the decrypted packets and the clear packets.

104. The method according to claim 102, wherein the partially encrypted television program comprises a digital partially encrypted television program.

105. The method according to claim 102, wherein the partially encrypted television program is compressed, and wherein the encrypted packets comprise packets carrying information that is needed to decompress the television program.

106. The method according to claim 102, wherein the partially encrypted television program complies with an MPEG standard, and wherein the encrypted packets comprise transport stream packets carrying a payload that comprises a packetized elementary stream (PES) header.

107. The method according to claim 102, wherein the partially encrypted television program complies with the digital satellite service transport standard, and wherein the encrypted packets carry a payload of a packetized elementary stream header.

108. The method according to claim 102, wherein the encrypted packets comprise video packets carrying a payload of a video sequence header.

109. The method according to claim 102, wherein the encrypted packets comprise video packets carrying a payload of a group of pictures header.

110. The method according to claim 102, wherein the encrypted packets comprise video packets carrying a payload of closed captioning information.

111. An electronic storage medium storing instructions which, when executed on a programmed processor, carry out the method of decoding according to claim 102.

112. The method according to claim 102, wherein the receiving, decrypting and decoding are carried out in an integrated circuit.

113. The method according to claim 112, wherein the integrated circuit comprises one of an application specific integrated circuit and a field programmable gate array.

114. The method according to claim 103, wherein the receiving, decrypting and decoding are carried out in a television device.

115. The method according to claim 114, wherein the television device comprises a television set-top box.

116.   A method of encrypting a packetized stream of information, comprising:

examining packets of data in the stream of information to identify a predetermined packet type, wherein the predetermined packet type is needed to decode the data stream; and

encrypting packets identified as being of a predetermined packet type.

117.   The method according to claim 116, wherein the stream of information represents a television program and wherein the encrypting comprises encrypting packets identified as a packets that are needed to decode the television program.

118.   The method according to claim 116, wherein the television program is compressed, and wherein the predetermined packet type comprises a packet type that is needed to decompress the television program.

119.   The method according to claim 116, wherein the television program complies with an MPEG standard, and wherein the predetermined packet type is identified as transport stream packet carrying a payload that comprises a packetized elementary stream (PES) header.

120.   The method according to claim 116, wherein the television program complies with an MPEG standard, and wherein the predetermined packet type is identified as a packet containing MPEG I-picture packets.

121.   The method according to claim 116, wherein the television program complies with the digital satellite service transport standard, and wherein the predetermined packet type comprises packets carrying a payload of a packetized elementary stream header.

122.   The method according to claim 116, wherein the predetermined packet type comprises video packets carrying a payload of a video sequence header.

1   123.   The method according to claim 116, wherein the predetermined packet type

2   comprises video packets carrying a payload of a group of pictures header.

3

4   124.   The method according to claim 116, wherein the predetermined packet type

5   comprises video packets carrying a payload of closed captioning information.

6

7   125.   An electronic storage medium storing instructions which, when executed on

8   a programmed processor, carry out the method of encrypting a digital television

9   signal according to claim 116.

10

1   126.   A method of manipulating packetized digital content, comprising:

2   examining unencrypted packets to identify a predetermined packet type;

3   duplicating the packets identified as being of the predetermined packet type

4   to produce first and second duplicate packets; and

5   inserting the first and second duplicate packets into the digital content to

6   produce partially duplicated content having first and second duplicate packets

7   instead of the identified packets.

8

9   127.   The method according to claim 126, further comprising identifying the first

10   duplicate packets in the partially duplicated content and encrypting the first

11   duplicate packets to produce first encrypted duplicate packets.

12

13   128.   The method according to claim 127, further comprising inserting the first

14   encrypted duplicated packets into the digital content in place of the first duplicate

15   packets to produce partially encrypted content.

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17   129.   The method according to claim 128, further comprising identifying the

18   second duplicate packets and encrypting the second duplicate packets to produce

19   second encrypted duplicate packets.

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21   130.   The method according to claim 129, further comprising inserting the second

22   encrypted duplicate packets into the digital content in place of the second duplicate

23   packets to produce partially dual encrypted content.

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1   131.   A method of manipulating packetized digital content, comprising:

2   examining unencrypted packets to identify a predetermined packet type;

3   duplicating the packets identified as being of the predetermined packet type

4   to produce first and second duplicate packets;

5   encrypting the first and second duplicate packets; and

6   inserting the first and second encrypted packets into the digital content to

7   produce partially encrypted content.

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9   132.   The method according to claim 131, wherein the first and second duplicate

10   packets are encrypted under first and second encryption algorithms.

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1   133.   A method of manipulating packetized digital content, comprising:

2   examining unencrypted packets to identify a predetermined packet type;

3   duplicating the packets identified as being of the predetermined packet type

4   to produce first and second duplicate packets;

5   encrypting the first duplicate packets; and

6   inserting the encrypted first duplicate packets into the digital content to

7   produce partially encrypted content.

8

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134. A method of allowing multiple conditional access providers in a content delivery system, comprising:

examining unencrypted packets of content to identify packets of a predetermined type;

encrypting packets of the predetermined type using a first encryption method used by a first conditional access provider to produce first encrypted packets;

encrypting packets of the predetermined type using a second encryption method used by a second conditional access provider to produce second encrypted packets;

replacing the packets of the predetermined type with the first and second encrypted packets to produce partially dual encrypted content; and

distributing the partially dual encrypted content in the content delivery system.

135. The method according to claim 134, further comprising combining entitlement control messages for the first and second conditional access provider with the partially encrypted content.